

# The Right Dose, Every Day: Methadone in 2026

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ASAM 2026

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# Speakers



Ari Kriegsman is board-certified in internal medicine and addiction medicine and is the Medical Director for the Carlson Recovery Center and the BHN Springfield Opioid Treatment Program.



Ruth Potee is board-certified in family medicine and addiction medicine and has practiced for 26 years. She oversees 10 methadone clinics in Massachusetts, including the first fully licensed OTP at a county jail.



Daniel Liauw is board-certified in internal medicine and addiction medicine and works at Massachusetts General Hospital in primary care, Bridge Clinic, and Addiction Consult settings.

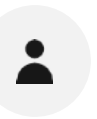
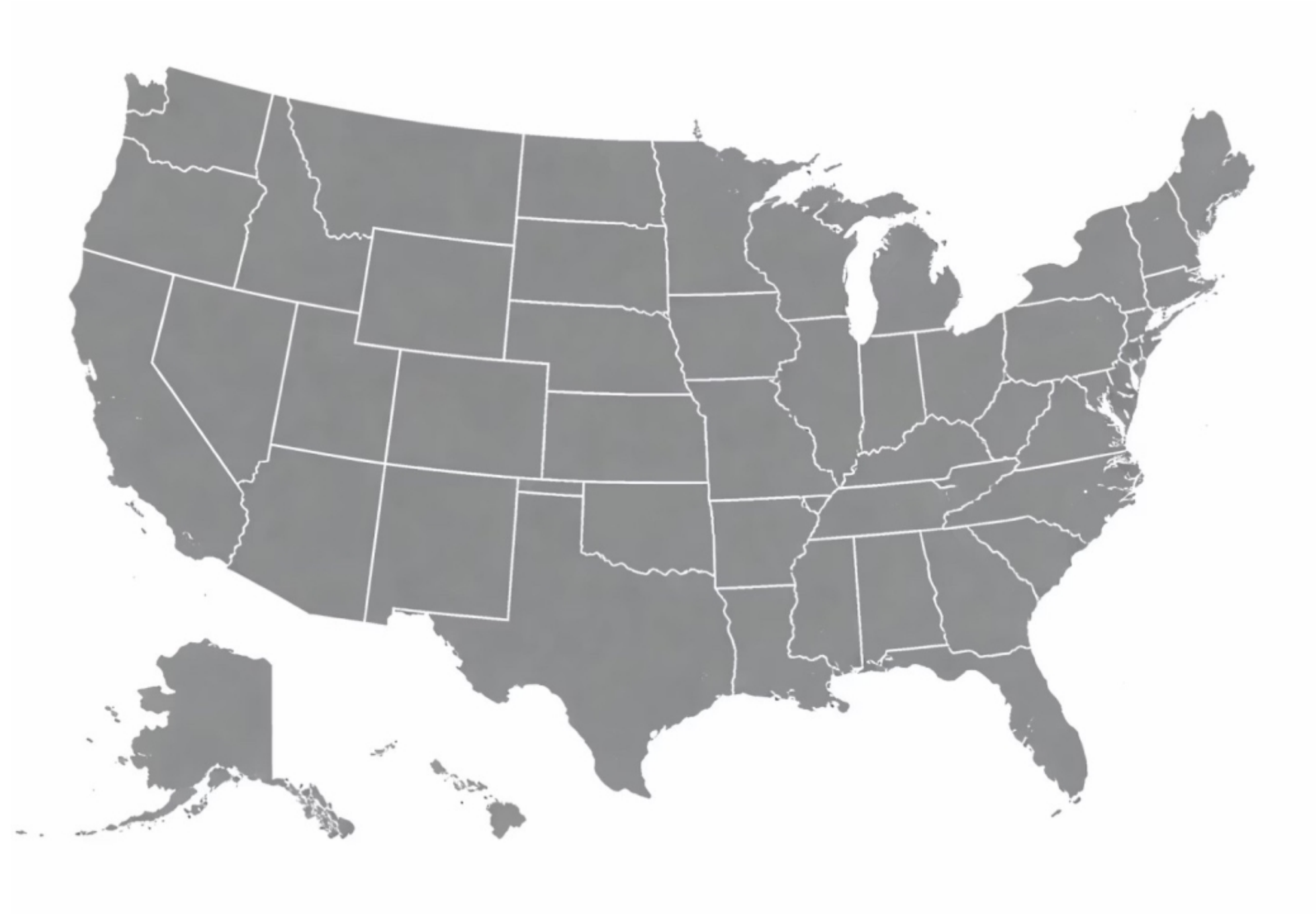
# Disclosures

- ◆ Ari Kriegsman, MD, FASAM
  - ◆ No disclosures
- ◆ Ruth Potee, MD, DFASAM, FAAFP
  - ◆ No disclosures
- ◆ Daniel Liauw, MD, MPH, FASAM
  - ◆ No disclosures
  - ◆ Discussing off-label use of subcutaneous buprenorphine (Brixadi®)

# Learning Objectives

1. Apply evidence-based strategies to titrate methadone doses and manage missed doses
2. Identify clinical presentations when split dosing and increased take home dosing of methadone could improve patient outcomes
3. Counsel a patient in options for transitioning from methadone to buprenorphine, including direct-to-inject buprenorphine

# Where do you work?



# Which practice setting(s) do you work? [max 4]

0

Hospital (including  
addiction consults)

0

Bed-based treatment  
(ASAM Level 3)

0

Opioid Treatment  
Program (OTP)

0

Bridge Clinic with 72h  
methadone

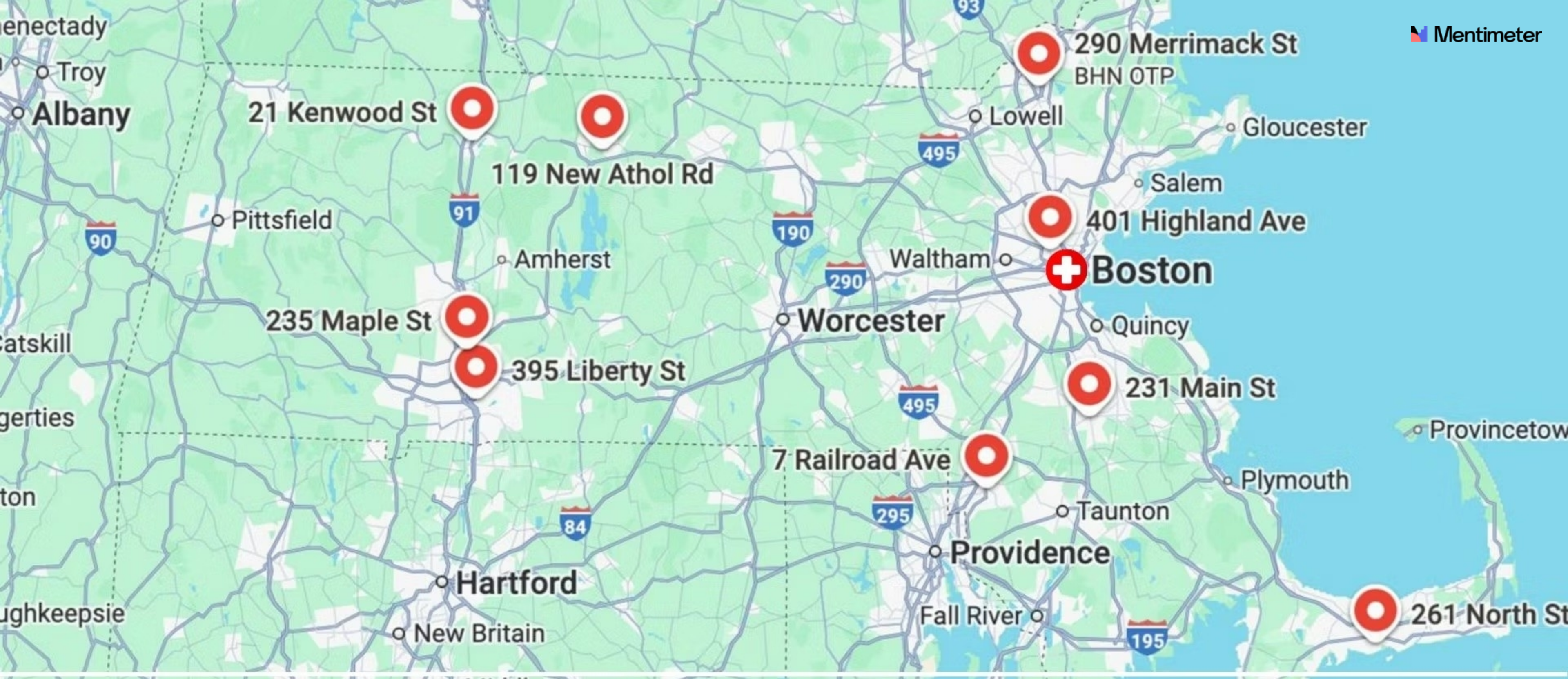
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Bridge Clinic without  
72h methadone

0

Other outpatient (e.g.  
primary care, OBAT)





We opened 9 OTPs in the last 6 years



Have you changed your methadone induction practice in the last 5 years (since fentanyl became predominant)?

0 Yes

0 No

0 N/A(not at OTP)



# How often do you start people at 50mg or higher?

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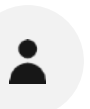
0 Most of the time

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0 Half the time

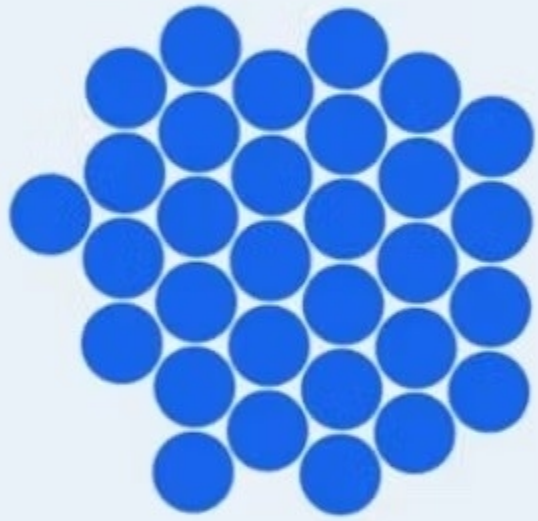
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0 Less than half the time



# Results from AATOD 2025

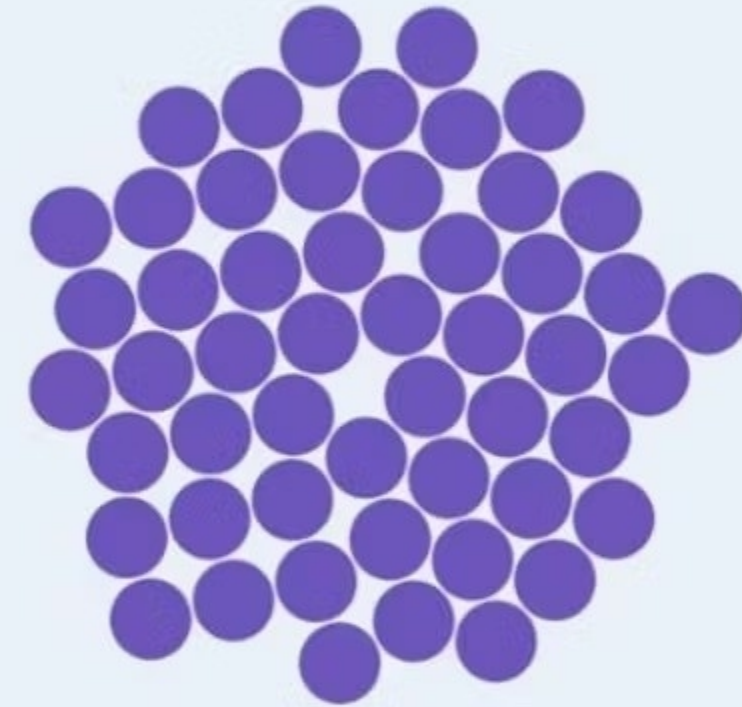
How often do you start people at 50 mg or higher?



31 Most of the time

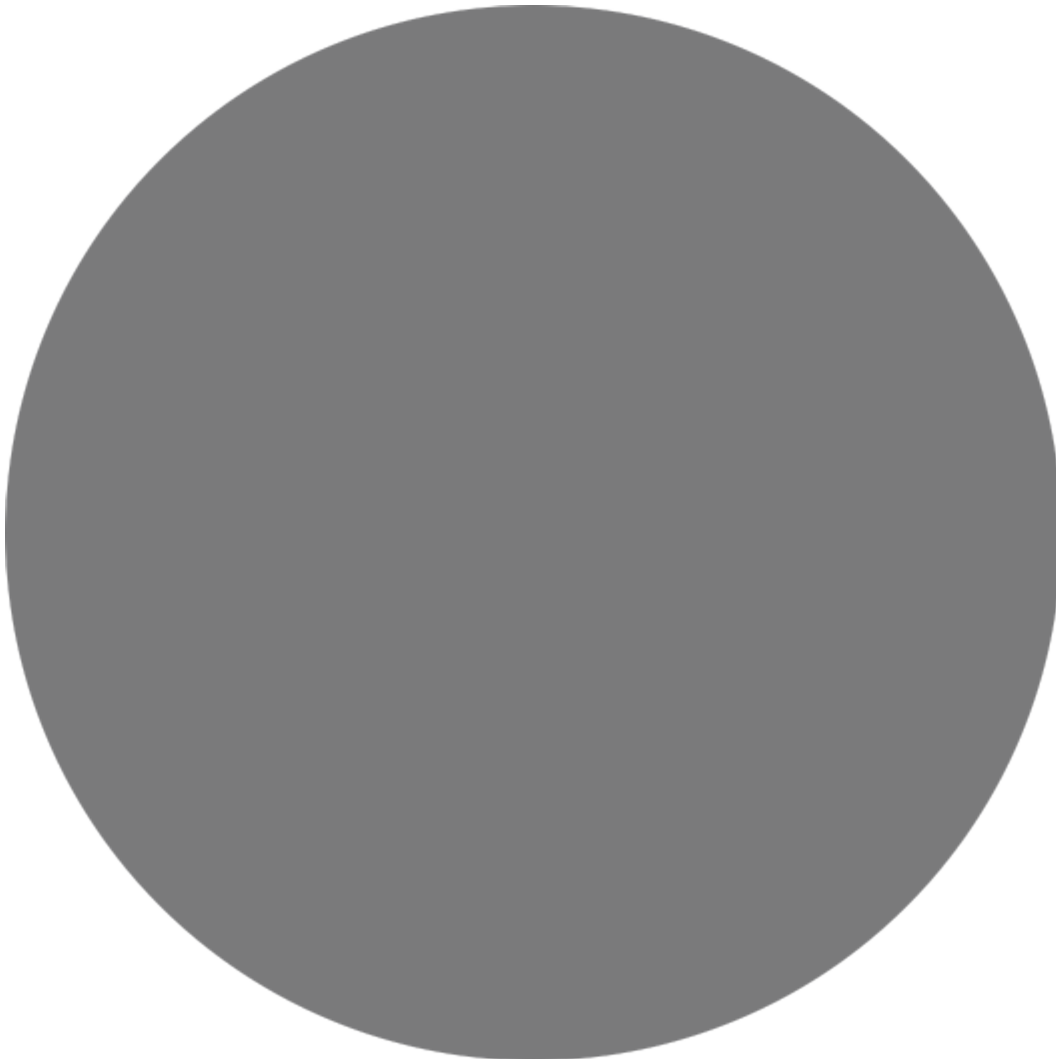


10 Half the time



52 Less than half the time

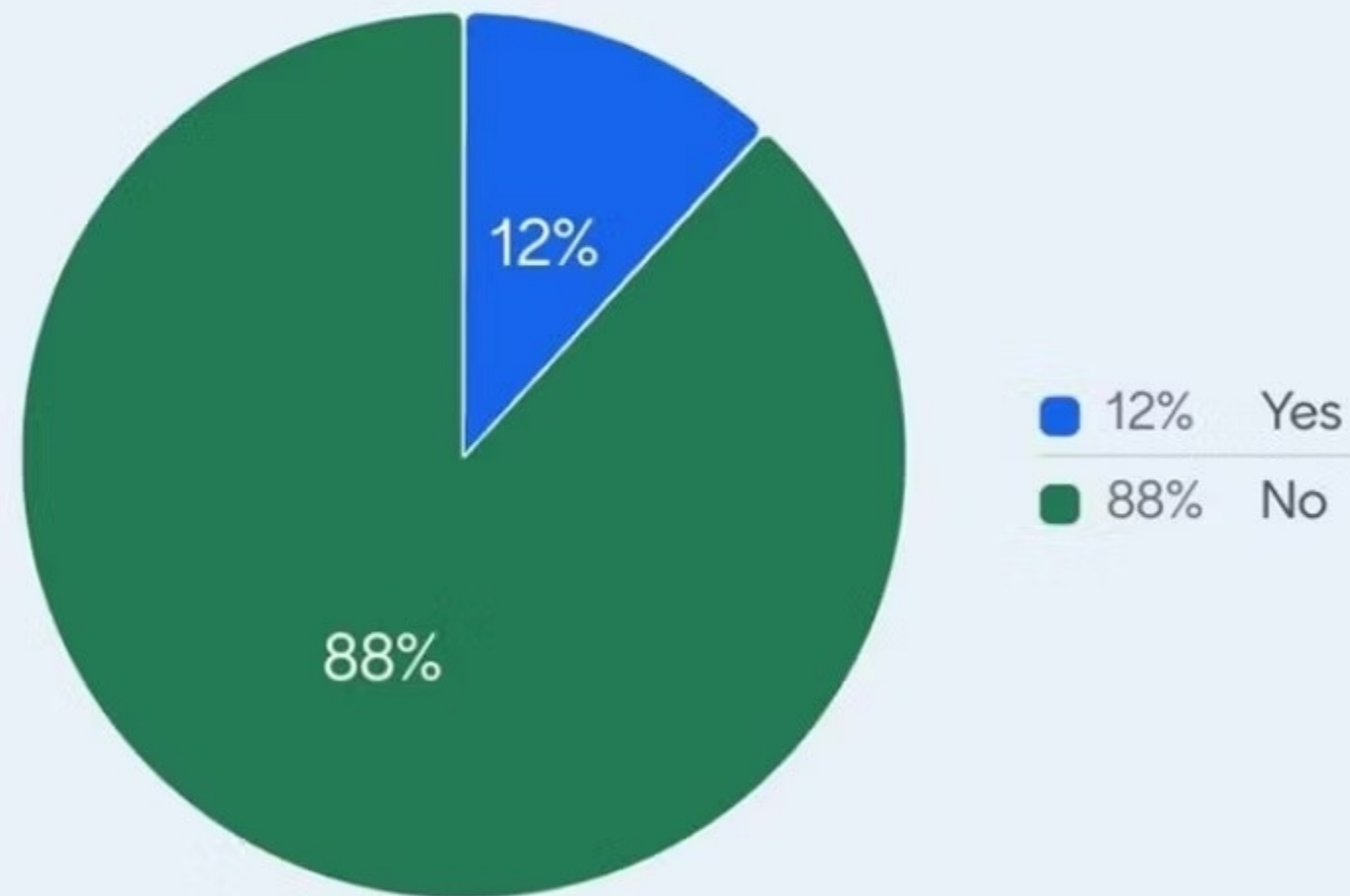
# Have you done a first day new start at 70mg or higher?



- Yes
- No

# Results from AATOD 2025

Have you done a first day new start at 70 mg or higher?



“They start you at 30 mg and increase by 5 mg every 5 days”

Methadone induction schedules fail to meet the needs of persons with high opioid tolerance in the fentanyl era

# First Day Dosing – 42 CFR §8.12 (2024)

- (ii) For each new patient enrolled in an OTP, the initial dose of methadone shall be **individually determined** and shall include consideration of the type(s) of opioid(s) involved in the patient's opioid use disorder, other medications or substances being taken, medical history, and severity of opioid withdrawal. The **total dose for the first day should not exceed 50 milligrams unless the OTP practitioner**, licensed under the appropriate State law and registered under the appropriate State and Federal laws to administer or dispense MOUD, **finds sufficient medical rationale**, including but not limited to if the patient is transferring from another OTP on a higher dose that has been verified, and documents in the patient's record that a higher dose was clinically indicated.

# First Day Dosing – 42 CFR §8.12 (2024)



**Individualized  
Assessment**



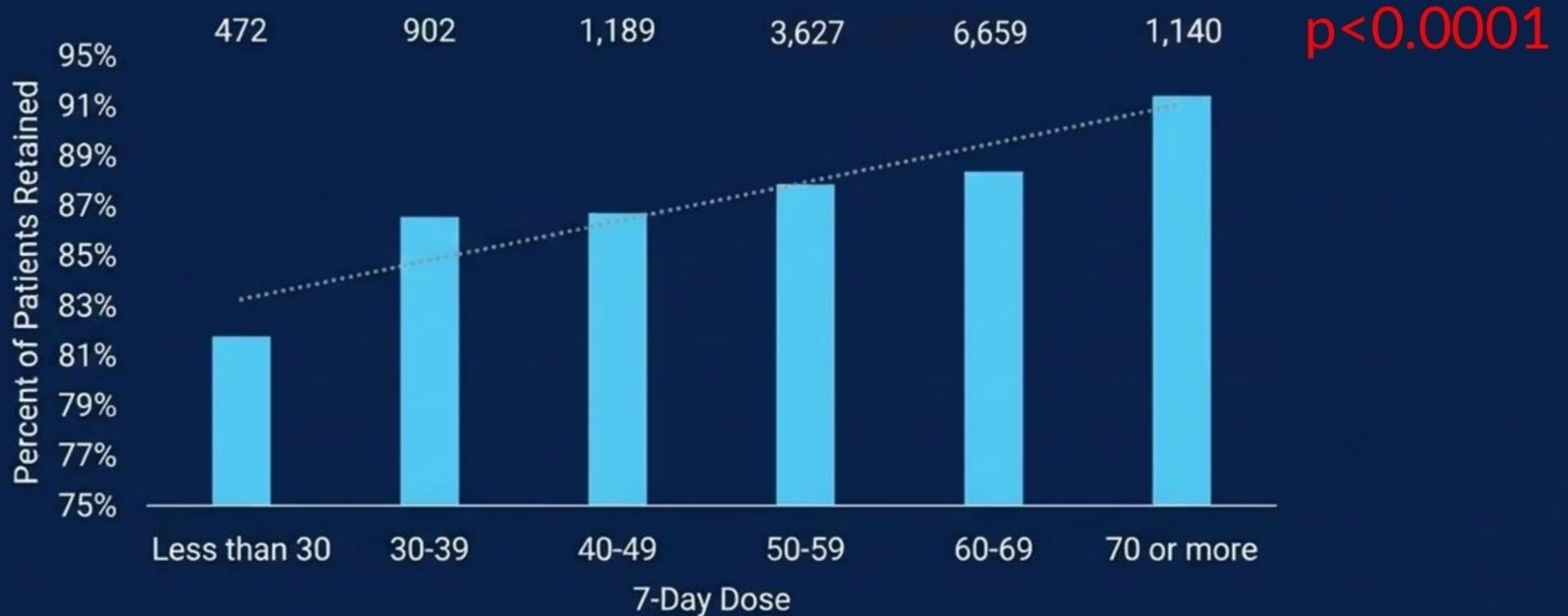
**First Day Dose  
Limit**



**Exceptions &  
Documentation**

“total dose for the first day should not exceed 50 milligrams unless the OTP practitioner... finds sufficient medical rationale... and documents... that a higher dose was clinically indicated”


# Average 30-Day Retention vs. 7-Day Dose




**FIGURE 1.** The relationship between the 30-day retention and the dose of methadone administered on day 7.

Sherrick, 2025


# Right Dose Quickly and Safely




“To get a change in dose, you need to meet with the counselor, fill out paperwork and a dose change might take 2 weeks”



“They start you at 30 mg and increase by 5 mg every 5 days”



“If you ask for a dose change, they consider you “unstable” and take away all of your bottles. It is not worth getting to a stable dose”



“The clinic doesn't do split doses even though I am more stable when I divide my methadone and take it twice a day”




# Nurses Can Assess for Dose Changes

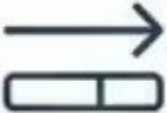



# Questions at the Window


It is important that you are on the right dose that lasts 24 hours. Don't feel ashamed to ask for the right dose and please don't hold yourself at too low a dose.

## Patient Self-Assessment Questions

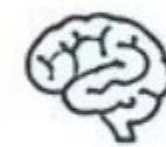
 When do you take your dose?

 How long does it last?

 When do you feel symptoms coming?

 How much are you still using?

## Understanding Withdrawal (COWs)



Late COWs (COWs works best in the early stages of withdrawal)



Restlessness



Insomnia



Drug dreams, cravings



Hots/colds

# Methadone Dosing (mg)- First 30 Days



# Rethinking Missed Dose Protocols



CASE: 40 M presents to clinic after missing 4 days of dosing. He last dosed at 100mg 5 days ago. He was out of state and during his time of missed methadone, he increased his IV fentanyl use in order to prevent withdrawal.

Question: What dose would your clinic give him?

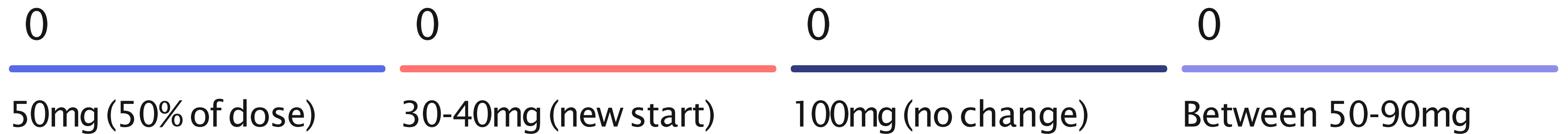
1. 50mg  
(50% of dose)

2. 30-40mg  
(new start)

3. 100mg  
(no change)

4. Between  
50-90mg

# What dose would your clinic give him?

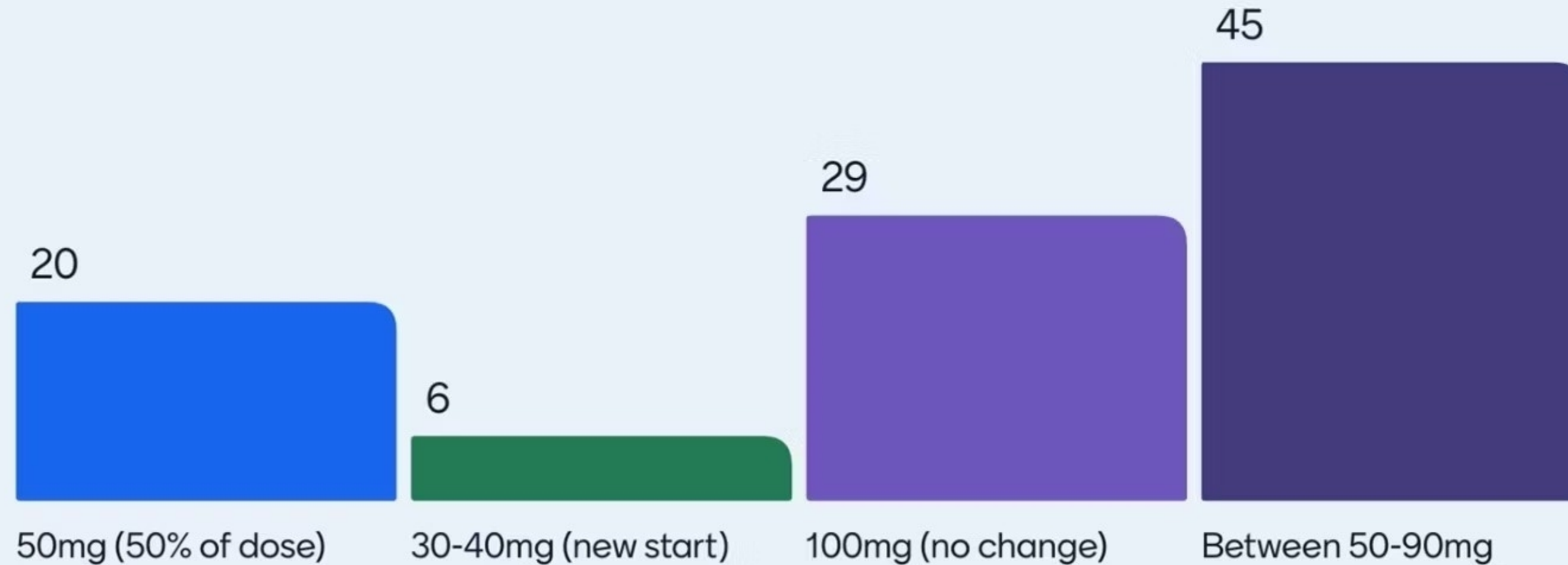


# Results from AATOD 2025

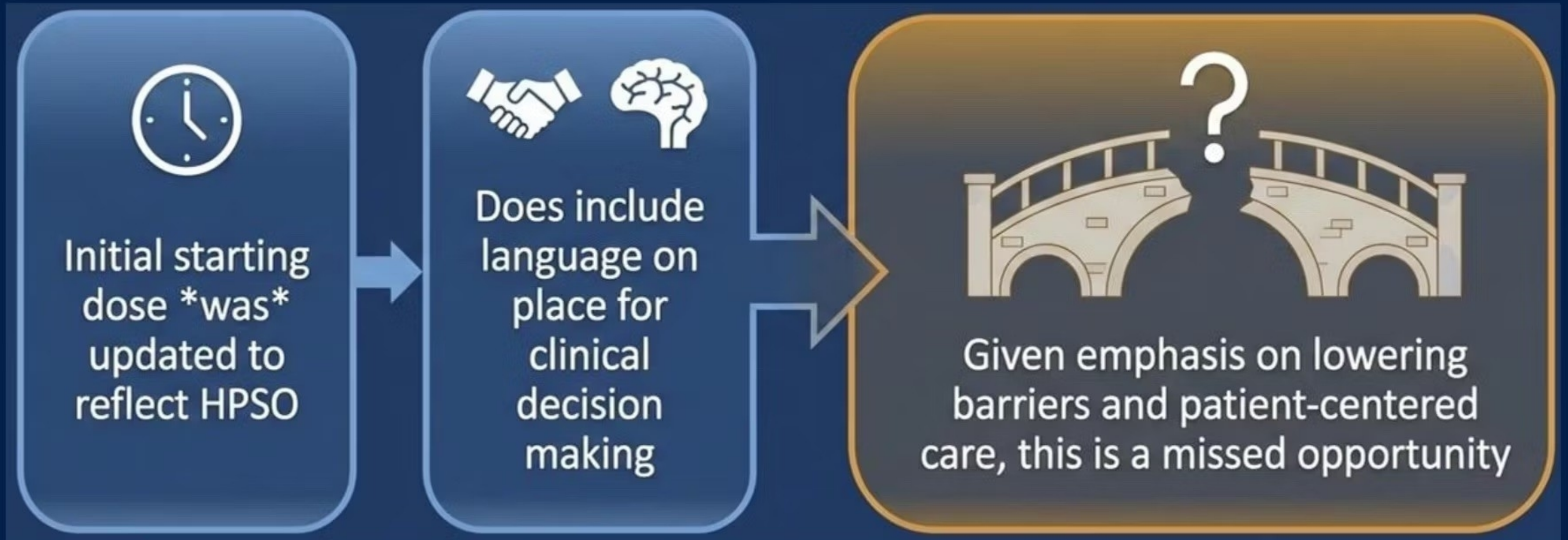
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Mentimeter

## What dose would your clinic give him?



# 42 CFR part 8 Commentary on Missed Doses



# What are we left with?

Days Missed	WHO (2009)	CPSO – Ontario (2011)	BCCSU – BC (2023)	SAMHSA TIP 63 (2018)
1–2 days	Resume full dose	—	—	Usually safe to resume full dose if patient not intoxicated
3 days	Reduce by ~25%	—	—	Consider reduced dose, clinical judgment required
4 days	Reduce by ~50%	Cancel & reassess, restart $\leq 30$ mg	Cancel & reassess; restart at 50% or 30–40 mg	Significant tolerance loss – restart at reduced dose, titrate
$\geq 5$ days	Restart induction	—	Cancel & reassess; restart at 30–40 mg	Treat as re-induction, start lower, titrate

# Why did we rapidly dose reduce after missed doses?



**Rationale: rapid loss of tolerance can occur within 3 days**

- Does NOT take into account: cross-tolerance, use of HPSO to cover opioid deficit



**Level of Evidence: expert opinion**

- Not based on empiric data
- Not patient-centered
- Reflects expert opinion before final rule
- Does not adequately consider how under-dosing puts patients at risk

# Let's Talk About Risk



# Missed Doses of Methadone at BHN

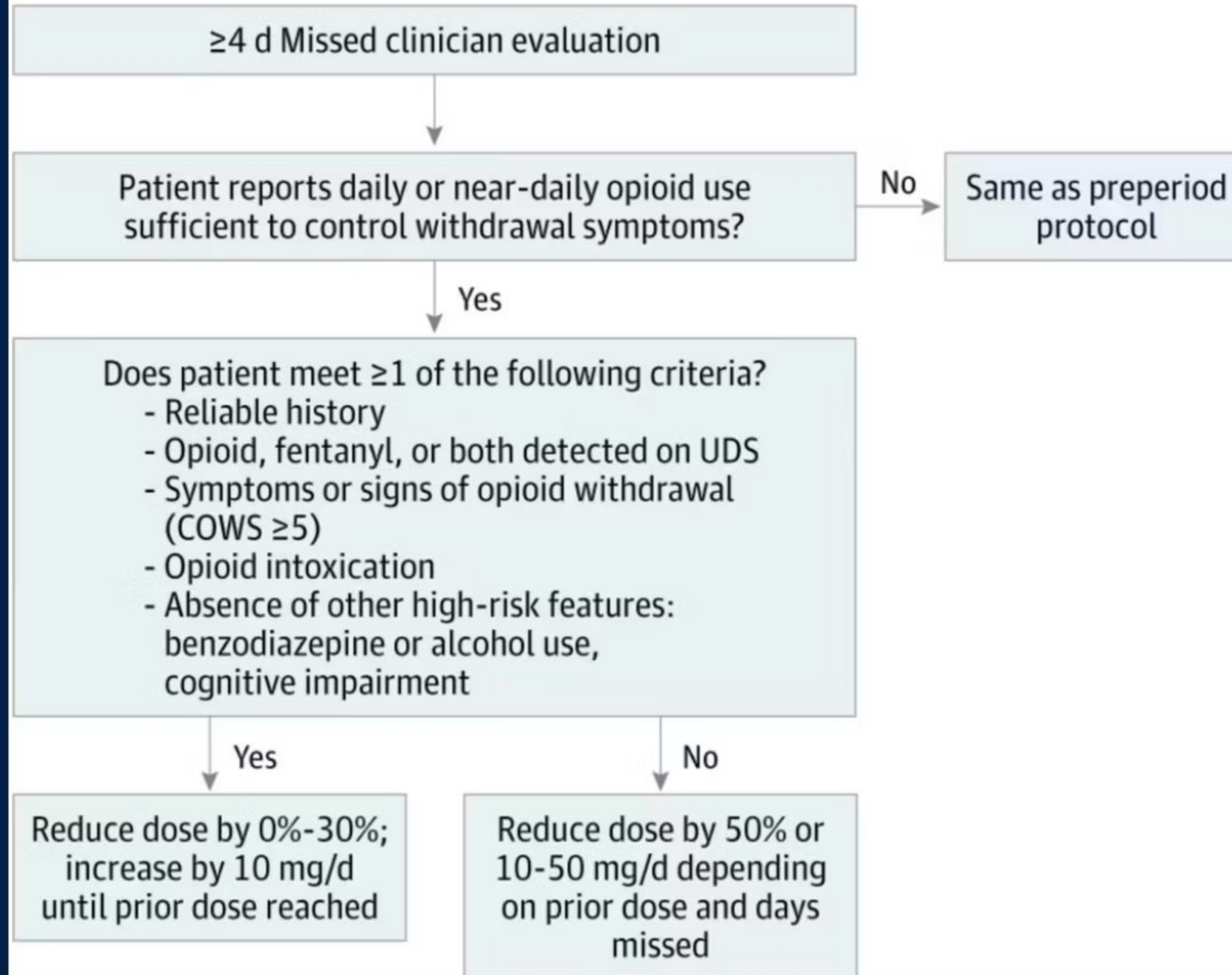


**Original Investigation** | Substance Use and Addiction

## Evaluation of a Novel Patient-Centered Methadone Restart Protocol

Paul J. Christine, MD, PhD<sup>1,2,3</sup>; Joshua Blum, MD<sup>3,4</sup>; Alexandra R. Tillman, MS<sup>3</sup>; [et al](#)

- ◆ **Objective:** To evaluate the safety and treatment retention associated with a novel methadone restart protocol.
- ◆ **Design, Setting, and Participants:**
  - ◆ Public, safety-net OTP in Colorado
  - ◆ Compared cohorts pre- and post- protocol change
  - ◆ August 2024 - June 2025
- ◆ **Exposure:** restart protocol incorporating patient-reported no prescribed opioid use and individualized assessments to determine restart doses

**B** Postimplementation period

**Table 2.** Methadone Restart Episode Characteristics and Changes in Dosing During the Preimplementation and Postimplementation Periods for the New Restart Protocol

Characteristics	Preimplementation period (2021)	Postimplementation period (2023)
No. of restart episodes	464	489
No. of missed dosing days, median (IQR)	7 (5 to 12)	7 (5 to 11)
Methadone dose prior to restart, mean (SD), mg	74 (45)	100 (42)
Methadone dose at restart, mean (SD), mg	47 (34)	95 (42)
Modeled change in methadone dose at restart, % (95% CI) <sup>a</sup>	-32.8 (-34.7 to -30.8)	-3.4 (-5.3 to -1.5)

<sup>a</sup> Statistical test for differences in average individual-level percentage change comparing preimplementation and postimplementation periods comes from a linear mixed model controlling for clustering at the patient level to account for individuals with multiple restarts.

**Conclusion:** “A protocol that considered interim opioid tolerance was associated with higher restart doses without compromising safety or treatment retention.”

Christine, 2025

# WITHOUT DAILY ILLICIT OPIOID USE

## Missed 1 – 4 Days

- No dose adjustment

## Missed 5 – 7 Days

*Methadone < 60mg*

- No dose adjustment

*Methadone ≥ 60mg*

- Missed 5 days: decrease by 20%\*
- Missed 6-7 days: decrease by 50%\*

## Missed 8 or More Days

- Restart at 40 mg\*

*\*Titrate back to therapeutic dose quickly*

## Titration back to Therapeutic Dose

- See Provider

# WITH DAILY ILLICIT OPIOID USE

## Missed 1 – 4 Days

- No dose adjustment

## Missed 5 or More Days

*Methadone < 60mg*

- No dose adjustment

*Methadone ≥ 60mg*

- Decrease by 5 mg daily for each day missed after 4 days
- Don't decrease below 40 mg

## Titration back to Therapeutic Dose

Dose decreased by ≤50 mg

- Increase by 10 mg daily until back to original dose

Dose decreased by > 50 mg

- See Provider

- BHN OTP Clinics -  
Algorithms to Calculate Doses of Methadone after Missed Days

## Missed Methadone Doses

(Single Daily Dose)

Without Daily Fentanyl Use

Original Dose (mg)

# of Missed Days

New Dose (mg)

With Daily Fentanyl Use

Original Dose (mg)

# of Missed Days

New Dose (mg)



← Handout

# What Is An Excellent Tool To Lower Risk of Missed Doses?



Then Insert Slides 14-19 from Ari's deck

# Lessons Learned from the Pandemic



- Take Home Bottles Are Safe



- They Increase Patient Satisfaction



- Improve Adherence

Home | JAMA | Vol. 327, No. 9

Original Investigation

FREE

## Association Between Increased Dispensing of Opioid Agonist Therapy Take-Home Doses and Opioid Overdose and Treatment Interruption and Discontinuation

Tara Gomes, PhD<sup>1,2,3,4</sup>; Tonya J. Campbell, MPH<sup>1</sup>; Sophie A. Kitchen, MSc<sup>2</sup>; et.al

➤ [Author Affiliations](#) | [Article Information](#)

> J Subst Abuse Treat. 2022 Oct;141:108801. doi: 10.1016/j.jsat.2022.108801. Epub 2022 May 8.

## Treatment retention, return to use, and recovery support following COVID-19 relaxation of methadone take-home dosing in two rural opioid treatment programs: A mixed methods analysis

Kim A Hoffman<sup>1</sup>, Canyon Foot<sup>2</sup>, Ximena A Levander<sup>2</sup>, Ryan Cook<sup>2</sup>, Javier Ponce Terashima<sup>3</sup>, John W McIlveen<sup>4</sup>, P Todd Korthuis<sup>5</sup>, Dennis McCarty<sup>5</sup>

# BHN's Take-Home Philosophy



## A Right, Not a Privilege

- Methadone is a life saving medication. Take home medications are not something to be “earned”. They are a right unless you prove otherwise.
- Take home medications help you take your medication every day



## Balancing Risks & Benefits

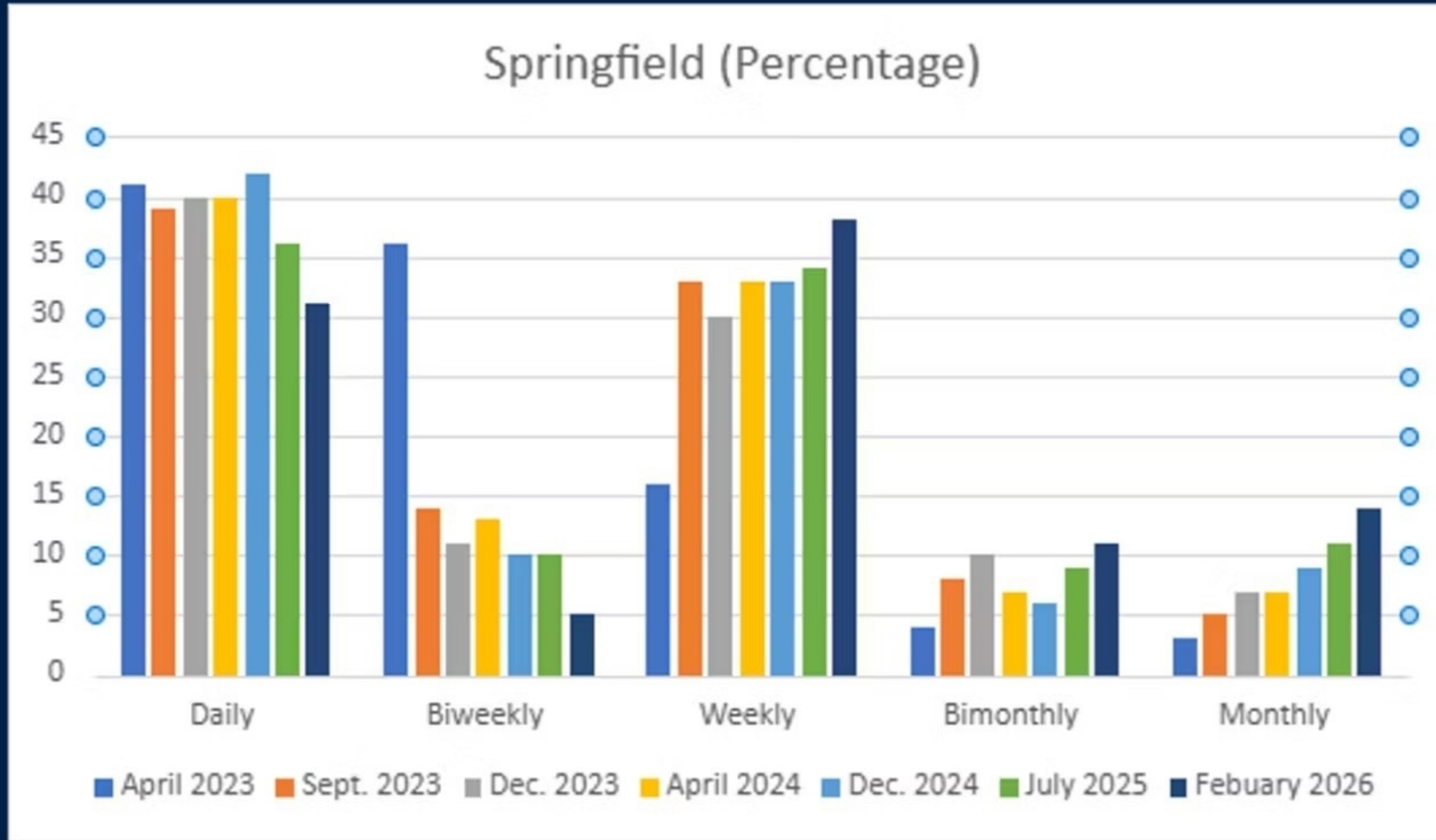
- Many people who are using drugs can safely manage their take home doses
- For most people on methadone, the risk of daily dosing outweighs the risks of take home medication
- Certain people do need to dose daily.
- We still use toxicology/call backs/require bottles to be returned



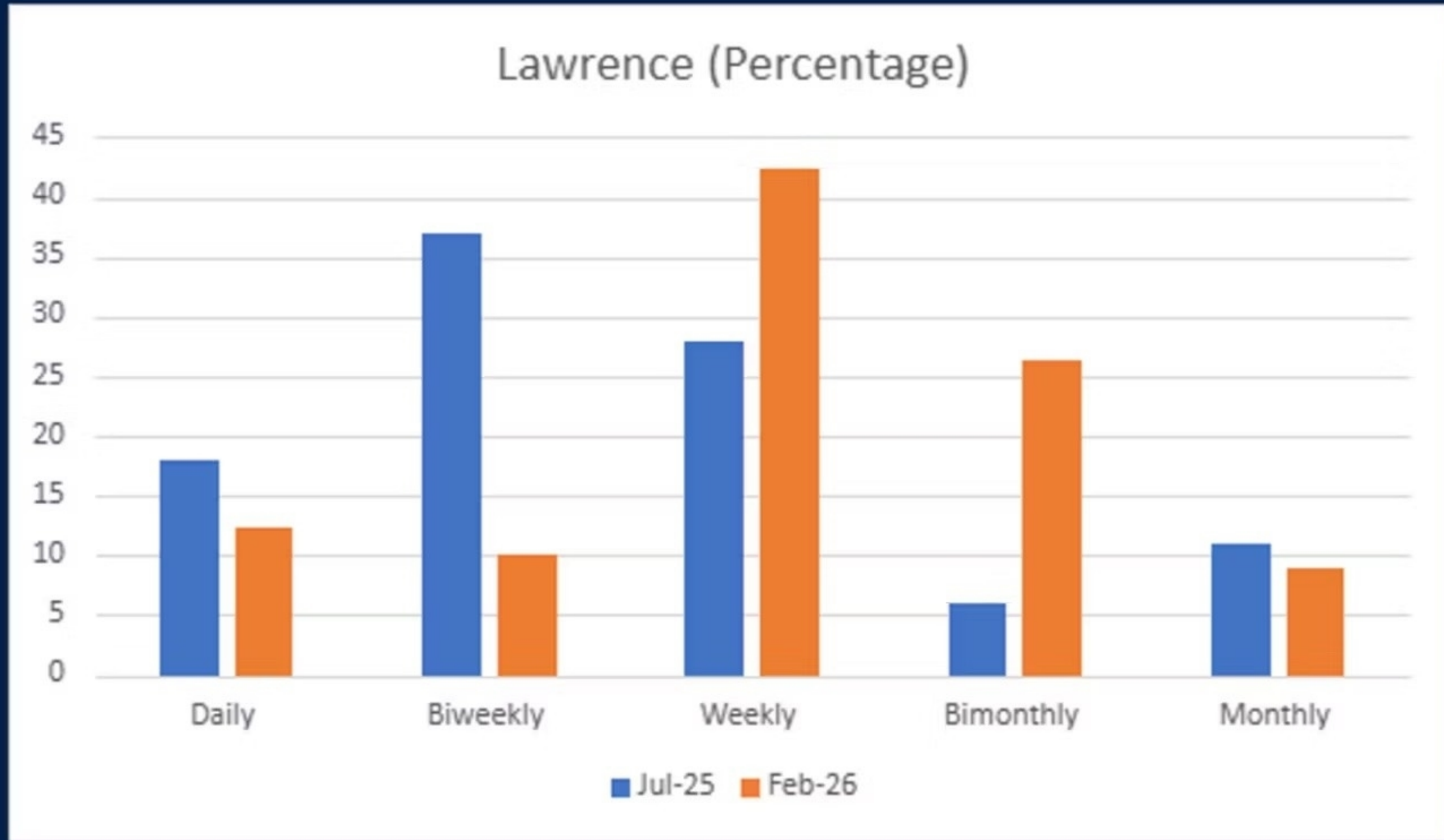
## Improving Health & Quality

- Taking methadone decreases mortality, improves QOL
- Proportions of patients with THM is an important quality measure

# Take Home Bottles As A Quality Measure: **Largest Clinic**



# Take Home Bottles As A Quality Measure: **Newer Clinic**



# Split Dosing



## Definition:

dispensing of a single dose of MOUD as separate portions to be taken within a 24-hour period



## Rationale:

more stable, steady-state medication levels

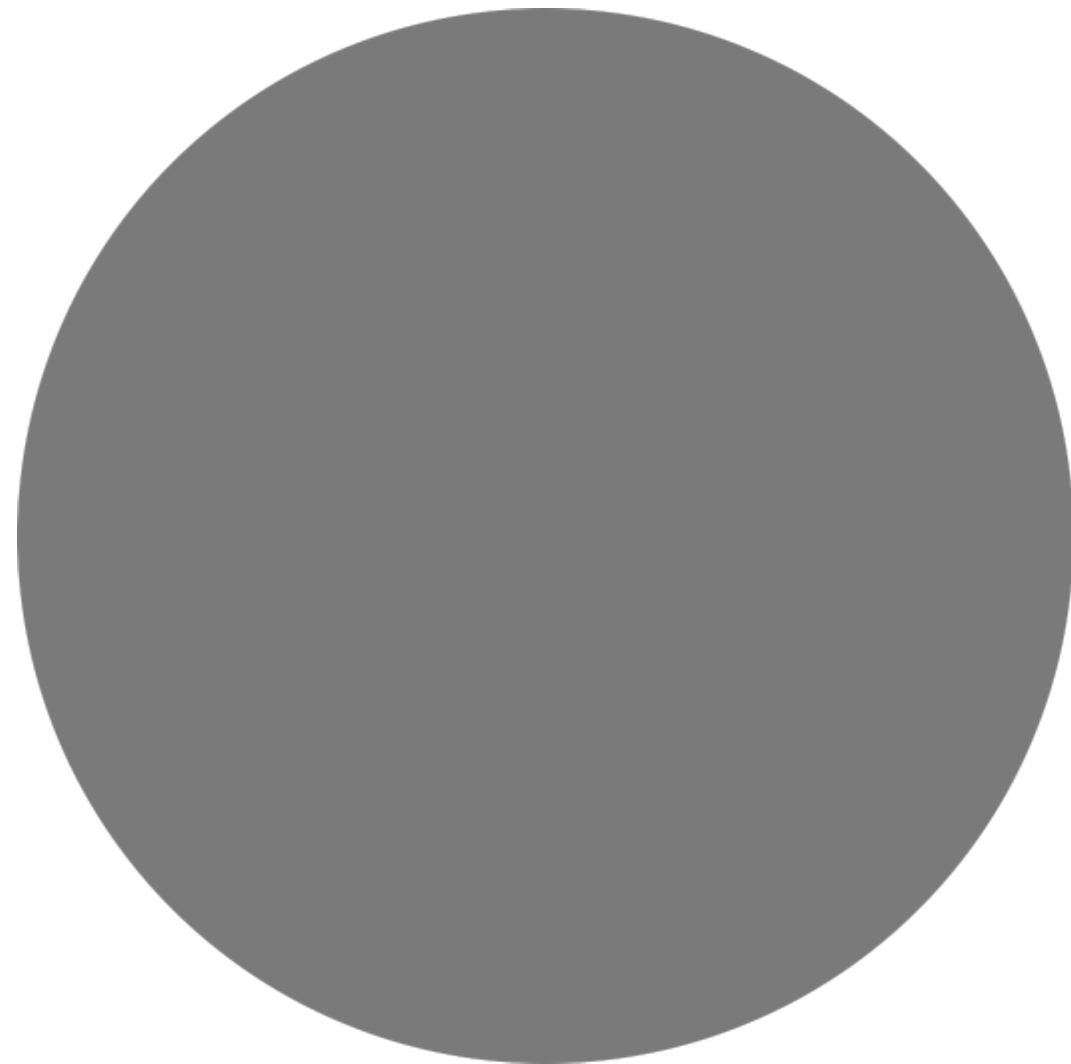


## Indications:

- genetic variant which increases methadone metabolism
- consumption of other medications or alcohol that leads to more rapid metabolism
- pregnancy
- concurrent pain indication

1. Pregnancy
  - a. Most commonly in the 2<sup>nd</sup> or 3<sup>rd</sup> trimester
  - b. May continue split dose in the postpartum period
2. Chronic Pain
  - a. If pain is still unmanaged by methadone BID, consider coordinating with PCP or other specialists for a PRN oxycodone prescription for breakthrough pain
3. Rapid Metabolism
  - a. Classic symptoms:
    - i. Sedation in the AM after dosing methadone and withdrawals in the evening
    - ii. The morning sedation is not always present
  - b. Does NOT have to be confirmed with peak/trough labs
    - i. Can be self-reported
  - c. May be related to drug use (*ex/any uppers such as cocaine or Adderall*)
  - d. May be related to increased activity (*ex/exercising or a physically laborious job*)
  - e. Sweating during hot summer days also play a role
4. Increasing Methadone Dose Indefinitely
  - a. Some patients find that they are increasing their methadone dose indefinitely without finding a therapeutic dose, with continued w/d symptoms at the end of the day
  - b. This is reason enough to try a BID dosing regimen of methadone
  - c. This does not apply if the patient is newly starting methadone and has not yet made an effort to reach a therapeutic dose
5. Other Adverse Effects of Methadone
  - a. Includes sweating, GI discomfort, hypotension, bradycardia, concern for respiratory depression, etc.

# Does your clinic require Peak/Trough levels for split dosing outside of pregnancy?



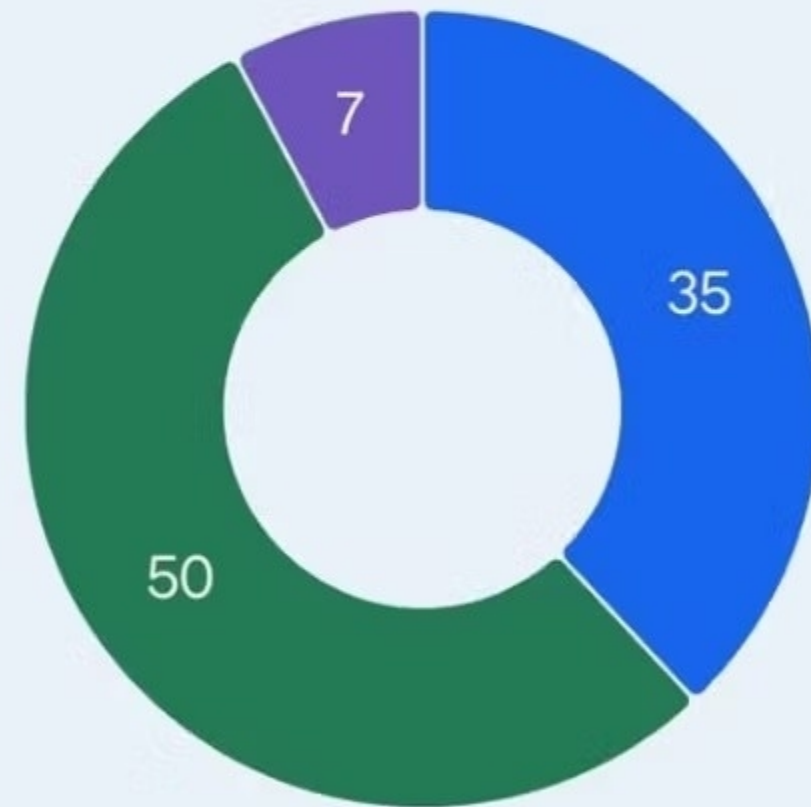
- Yes
- No
- I don't know

# Results from AATOD 2025

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Does your clinic require Peak/Trough levels for split dosing outside of pregnancy?



LETTER · Volume 152, 209096, September 2023

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# Individualizing methadone treatment with split dosing: An underutilized tool

[Hannan M. Braun](#)  <sup>a,b</sup>  · [Ruth A. Potee](#) <sup>c</sup> 

## A B S T R A C T

Methadone's long half-life typically allows for once daily dosing. However, a growing body of evidence and clinical experience shows that some patients may benefit from twice-daily (“split”) dosing to produce more stable symptoms and minimize side effects, independent of serum peak-to-trough levels. Concerns regarding split dosing typically center on diversion and poor adherence and must be taken seriously. However, policy changes during COVID-19 demonstrate that the rigidity historically applied to methadone may be unnecessarily stringent. Given clinical advances and policy updates, we believe clinicians should weigh the risks and benefits of this underutilized tool for select patients, as we await the evidence-based recommendations our patients deserve.

# Split dosing at BHN

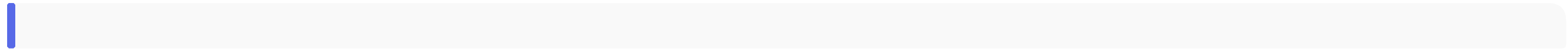
Site	Census	Split Dose	Percentage
Springfield	1097	112	10%
Holyoke	506	44	9%
Greenfield	261	53	20%
Orange	259	48	19%
Somerville	171	17	10%
Lawrence	99	15	15%
Attleboro	48	9	19%

Total  
Combined  
Census

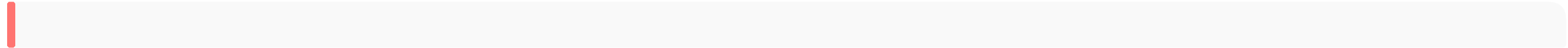
2441	298	12%
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If you had control, what would you most want to change at your OTP? (pick your top 3)

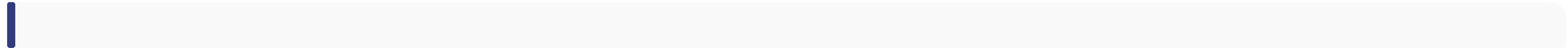
Admit patients 5 days a week



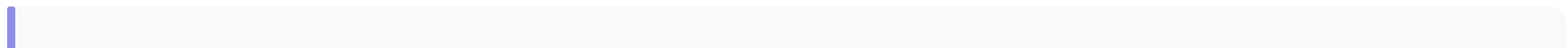
Faster dose changes to stabilize people



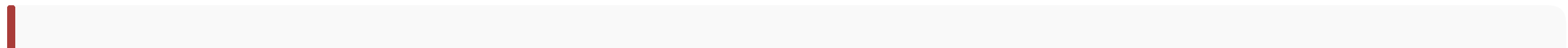
More aggressive dose inductions



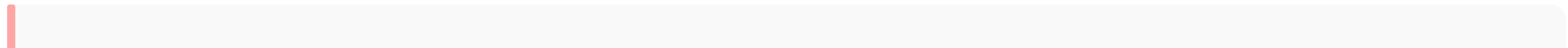
Easier access to take homes



Easier ability to split dose

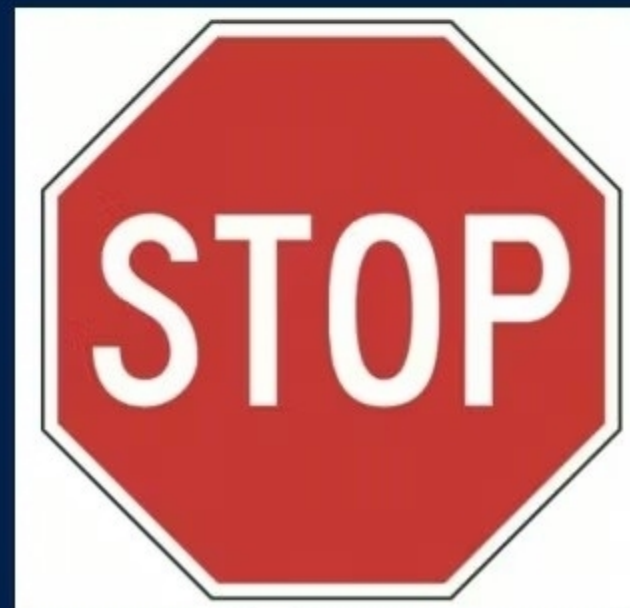


Changing missed dose protocols



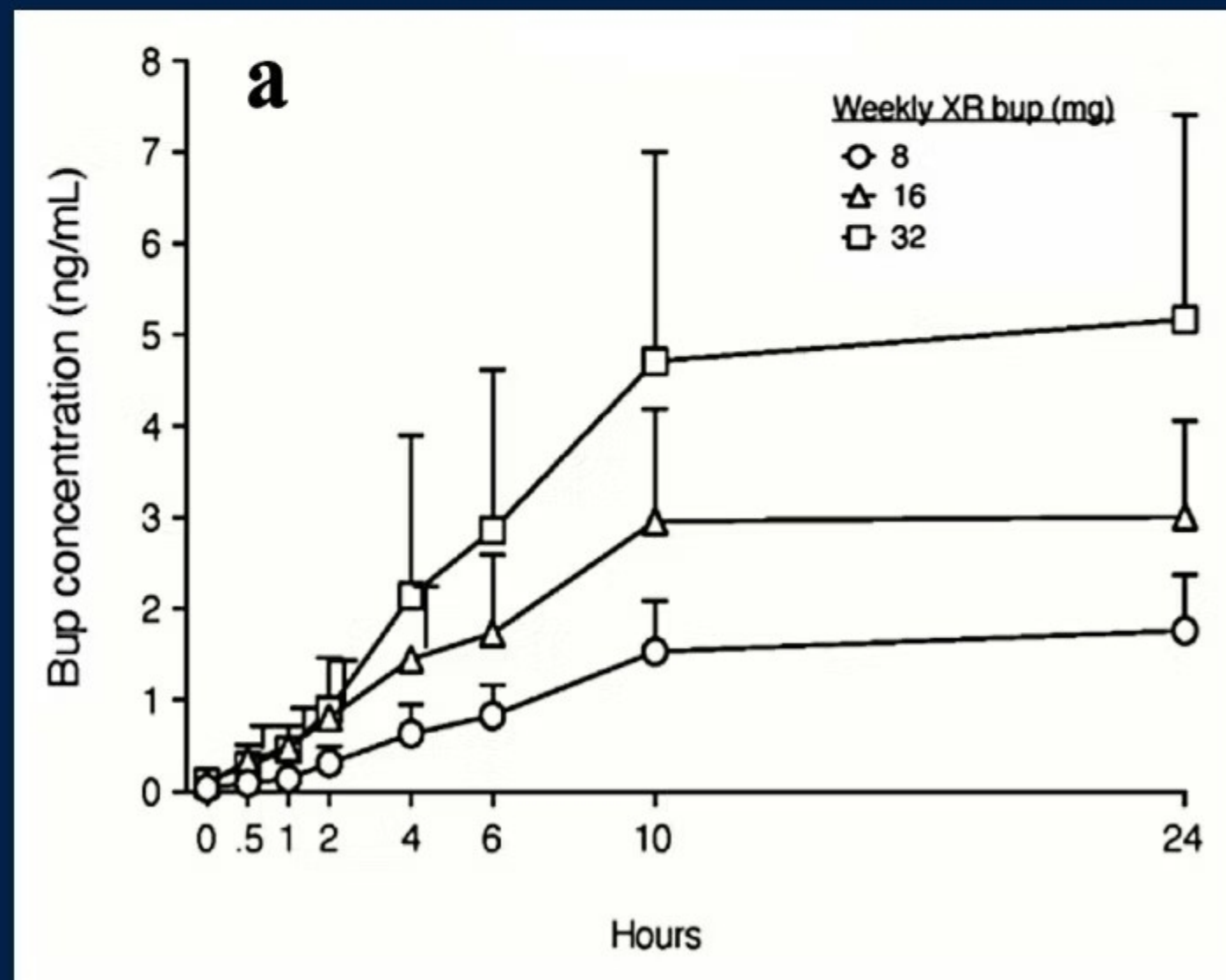
# DTI Buprenorphine from Methadone: Rationale

- ◆ Methadone
  - ◆ “I have 27 take homes, but I’m just done with the clinic”
  - ◆ “It takes forever to decrease my dose at the clinic”
  - ◆ “It’s just time”
- ◆ Sublingual buprenorphine
  - ◆ “Last time I tried films, I got so sick”
  - ◆ “I’m shaking and sweating every time I think about trying”



# DTI Buprenorphine from Methadone: Rationale

- ◆ Direct-to-inject (DTI) from fentanyl (FYL)
  - ◆ ED INNOVATION: ED-initiated SC bup 24mg from FYL, low precip w/d
  - ◆ SF/CA BRIDGE teams: Bridge Clinic-initiated “weekly” SC bup from FYL
  - ◆ Seattle team: overlapping SC bup



SC = subcutaneous  
XR = extended-release

D'Onofrio, JAMA Network Open, 2023  
Rosenwohl-Mack, DAAD, 2025  
Waters, JAMA Network Open, 2025  
CAM2038, Braeburn Inc, 2023

# DTI Buprenorphine from Methadone: Early Experience

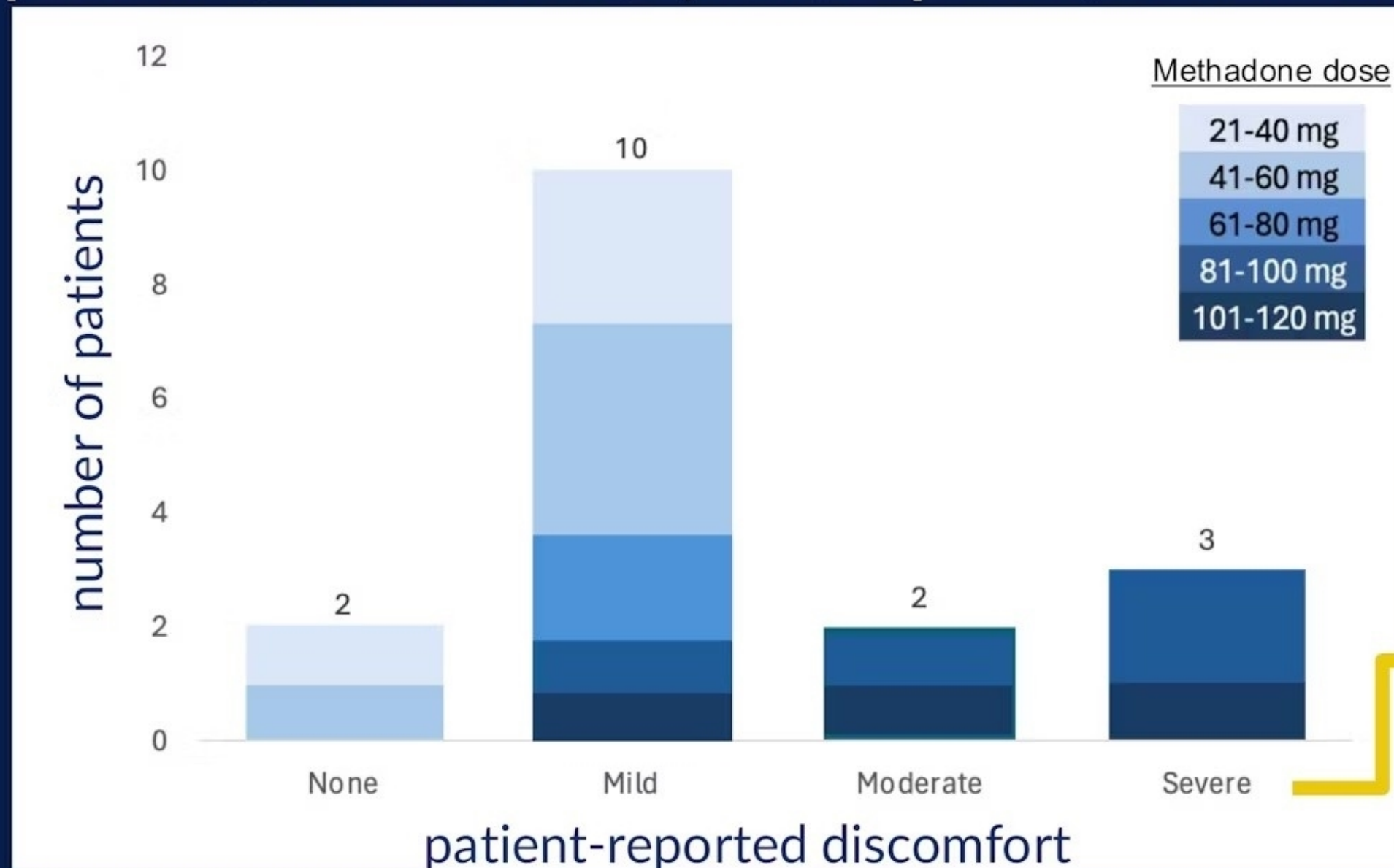
- ◆ n=17
  - ◆ Setting: Bridge Clinic, primary care clinic; calendar year 2025
  - ◆ Inclusion: OUD in remission, >1 month of continuous methadone
  - ◆ Exclusion:  $\geq 4$ mg SL buprenorphine
- ◆ **Methadone doses: 24 - 120mg**
- ◆ **Median length of methadone episode: 2 years [2 months - 13 years]**
- ◆ **Counseling**
  - ◆ Explored methadone split-dosing, take-home dosing, clinic transfer
  - ◆ Offered transition with SL buprenorphine

# DTI Buprenorphine from Methadone: Early Experience

- ◆ Protocol completion: **94% (16/17)**
  - ◆ 1/17 returned to methadone at 110mg with increased THB
  - ◆ 15/16 completed second monthly buprenorphine injection

# DTI Buprenorphine from Methadone: Early Experience

- ◆ Protocol completion: **94% (16/17)**
  - ◆ 1/17 returned to methadone at 110mg with increased THB
  - ◆ 15/16 completed second monthly buprenorphine injection
- ◆ Patient-reported discomfort (retrospective assessment)



1/3: recent fentanyl use  
2/3: active benzo use disorder

# DTI Buprenorphine from Methadone: Lessons Learned

- ◆ Mild discomfort can be expected
  - ◆ Predictors of discomfort: higher methadone, untreated anxiety
  - ◆ *Empiric* treatment of anxiety with benzo or gabapentin
  - ◆ Night 1 is the most uncomfortable
- ◆ Methadone dosing: dose through SC 24mg equiv
- ◆ SL bup: wait  $\geq 8$ h after SC bup
- ◆ Other themes
  - ◆ Reform of methadone treatment
  - ◆ Identification of active SUD
  - ◆ Discussion regarding tapering off MOUD
  - ◆ Individualization of transition course

# DTI Buprenorphine from Methadone: MGH Protocol

Basal Methadone  $\geq$  80mg

Day	Methadone	Buprenorphine	Non-opioid
-1	Full dose	SL bup 0.5mg BID *	
0	Full dose	SL bup 0.5mg QID *	
1	Full dose	SC bup 8mg	clonidine 0.1mg TID PRN + clonazepam 1mg qhs or gabapentin 600mg TID
2	Full dose	SC bup 16mg	Clonidine 0.1mg TID PRN
3		SC bup 128mg or 300mg (prefer latter)	

Basal Methadone  $<$  80mg

Day	Methadone	Buprenorphine	Non-opioid
1	Full dose	SC bup 8mg	clonidine 0.1mg TID PRN + clonazepam 1mg qhs or gabapentin 600mg TID
2	Full dose	SC bup 16mg	Clonidine 0.1mg TID PRN
3		SC bup 128mg or 300mg	

\* Reasonable to proceed with DTI if  
unable to complete SL lead in

SC = subcutaneous  
 BID = twice daily  
 QID = four times daily  
 PRN = nightly

# Final Takeaways/Summary

- ◆ Get to the right dose quickly and safely
- ◆ Consider whether loss of tolerance has occurred after missed methadone doses
- ◆ Take home bottles are a right, not a privilege
  - ◆ Proportion of THB should be a quality measure
- ◆ Split dosing is beneficial in a variety of scenarios
- ◆ Consider a direct-to-inject strategy in transitioning from methadone to buprenorphine

Handout



# References

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